

FOR OFFICIAL USE ONLY

JPRS L/10401

19 March 1982

West Europe Report

(FOUO 18/82)



FOREIGN BROADCAST INFORMATION SERVICE

FOR OFFICIAL USE ONLY

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

COPYRIGHT LAWS AND REGULATIONS GOVERNING OWNERSHIP OF MATERIALS REPRODUCED HEREIN REQUIRE THAT DISSEMINATION OF THIS PUBLICATION BE RESTRICTED FOR OFFICIAL USE ONLY.

FOR (

JPRS L/10401

19 March 1982

WEST EUROPE REPORT

(FOUO 18/82)

CONTENTS

POLITICAL

FRANCE

Relations of PSF Deputies, President, Party Examined (Pierre Avril; POUVOIRS, No 20, 1982)	1
Leftist Author on U.S., French, Soviet Third World Policy (Cornelius Castoriadis Interview; LE NOUVEL OBSERVATEUR, 2-8 Jan 82)	13

MILITARY

FRANCE

Sales, Production Statistics for Military Aircraft Updated (AIR ET COSMOS, 20 Feb 82)	24
Production, Sales, Plans for New Naval Missiles Detailed (Pierre Langereux; AIR ET COSMOS, 20 Feb 82)	30
Aerospatiale Sells Record Number of Tactical Missiles (Pierre Langereux; AIR ET COSMOS, 20 Feb 82)	40
Briefs	
Ramjet Engine for Missile	41

- a -

[III - WE - 150 FOUO]

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

POLITICAL

FRANCE

RELATIONS OF PSF DEPUTIES, PRESIDENT, PARTY EXAMINED

Paris POUVOIRS in French. No 20, 1982 pp 115-126

[Article by Pierre Avril, professor of public law and political science at the University of Paris X: author of "Le Regime Politique de la Ve Republique," 6 ed., 1980]

[Text] Born again like the Baptists, the Fifth Republic emerges from the second ballot of May-June 1981 not quite the same, nor quite different, which creates bewilderment and sometimes frenzy: the political collection of tales is enriched with an expression, l'ancien regime,¹ whose absurdity has no doubt a function of exorcism. The stage of readjustment which the regime was undergoing since 1974 has just ended in conformity with the institutional logic which was summarized as follows 3 years ago: "The return to universal suffrage by the combined effect of the presidential election and dissolution directs actions towards this formation of a majority." The spring balloting offered a striking illustration of it and in this connection the Giscardian episode is ended,² since the majority nature of the regime is reestablished and with it presidential dominance, "key-stone" of the institution, is confirmed more than ever. But the Fifth Republic's return to orthodoxy took place through a new phenomenon: a real party. There is, no doubt, the main novelty of the Septennate, emphasized moreover, by Francois Mitterrand himself: "It is the first time in the history of the republic that a party itself has an absolute majority of the seats in the National Assembly."³

A Not Very Secret Chief

For the semiparliamentary, semipresidential structure of the Fifth Republic to maintain itself, the majority of the deputies must support the policy and even the person of the chief of state. "President of all the French," as Francois Mitterrand defines it in his message to the congress members in Valence, "he could not be the man of a party;" but he maintains, with those who support it, a relationship which, because it is semiofficial, is no less decisive. General de Gaulle, who had refused to see for a long time in this bond, anything but a sort of subjective coincidence,⁴ ended up by

FOR OFFICIAL USE ONLY

admitting the need for it in his press conference of 27 November 1967,⁶ when he greeted the UNR /Union for the New Republic/ - UDT /Democratic Union of Labor/ Congress in Lille. The message to the socialist congress summarizes history to a certain extent.

This bond results first from a situation: The majority candidates presented themselves to the voters as the president's candidates. The Socialist Party, reorganized in 1971, developed afterwards around its first secretary and Mitterrand's victory brought in its wake that of his comrades (additionally, the rescue of the survivors of the communist group). The effect of the enthusiasm which is the origin of the new majority creates a somewhat unique solidarity of its members with their leader. It is found again in all the elections since 1963--with the exception of 1978. But the novelty of 1981 is due to the fact that this solidarity shows, in addition, an objective nature. The meaningless allegiance to which it was reduced until then was replaced by joint membership in an organization and support of the presidential promises expressed in the form of a contract made by the president with the French people which elected him, but also by the deputies who made use of his name. Francois Mitterrand reminded the latter of it, in a significant way, in his message to parliament on 8 July 1981:

"I have said several times that my promises are the charter of government operation. I will add, since universal suffrage was expressed twice, that they have become the charter of your legislative action...The prime minister will ask of you the powers which the national legislature has at its disposal, so that the contract which binds us to the French people,⁷ since last 10 May and 21 June, may be faithfully executed."

Thus there are justified in advance the measures through which the President of the Republic will demand of the deputies that they respect the "contract" which they have supported but which they did not write. This political restriction on parliamentary autonomy is not without an analogy in the "reserved domain" of the past: If it does not show its value of exclusion, it limits the assembly's⁸ field of initiative and preserves presidential freedom as the call to order made to the council of ministers on 23 September 1981 suggests: "Regarding my promises, it is my duty to see that they are carried out, more particularly regarding the schedule for their execution."

Nevertheless, the Elysee does not have institutional relations now with the assemblies⁹: Consequently a leadership as distant needs reserves and, from this point of view, the leadership of this secret chief is exercised in a manner which is both conventional and creative.

First, the liaison is insured by men whom the president trusts and who make up an inner circle analogous, if not similar, to that which

FOR OFFICIAL USE ONLY

Jean Charlot had examined in the UNR; the most influential of them enjoy a status which one would be tempted to compare with that of the "barons" of Gaullism, since it is based mainly on a loyalty shown all during the wandering in the wilderness of the Fifth Republic, the seniority of the trade guild can, nevertheless, be made up for by the promotion of new talents through the party branches whose organization supplies an instrument for selection which hardly existed before. The PS organization, divided into factions, creates a network for recruitment of holders of responsible positions, based on membership standards and one has thus observed that the important positions in the Palais-Bourbon were occupied mainly by members of faction A, that is to say, of "the followers of Mitterrand" (the chief of state does not like the adjective, but he did not completely reject it in his press conference of 24 September 1981): the chairmanship of the assembly, that of the group, the chairmanships of the committees, or, in lieu of them, the assistant chairmanship charged with political responsibility insuring "organizational" loyalty in the control of the parliamentary machine.

On the other hand, it is well known that the chief of state is very vigilant about the party whose leadership he has conveyed to the successor chosen by him. Mr Jospin is a regular visitor to the Elysee, whose attendance was observed, for example, at the breakfast which brought together on 15 September the president and the prime minister just before the latter's declaration to the assembly. In this respect, it should be pointed out that with Pierre Mauroy not belonging to faction A, the majority PS leadership protects what General de Gaulle called the Fifth Republic's¹⁰ "lack of armor" by insuring the chief of state against the independent whims of a prime minister who would attempt to rely on the socialist deputies.

Consequently the PS is an instrument of power, Mitterrand watches over its development and the control of its apparatus: he declared, "the PS is a remarkable reserve which can intervene at any time."¹¹ The relations which he maintains with his leaders reproduce, on another level, those of the president of the republic with the prime minister and show an almost constitutional parallel which helps to shore up the written constitution: the makeup of the leading organizations, executive committee and secretariat has it not been resolved at the Elysee with the first secretary in the same way the government's composition had been decided in agreement with the prime minister¹²?

As for the rest, that is regular political discussion, he lets it continue within the limits he has fixed, assuring himself that they are respected: is he not elected for 7 years, as he reminded emphatically on 24 September 1981? Having at his disposal the term and the means, he does not hurry to govern systematically like his predecessors, anxious to control everything and even in detail, because

FOR OFFICIAL USE ONLY

they did not have the same guarantees...That without prejudice to specific interventions and sovereign removals.¹³

"Play the Parliamentary Game Fully"

The chief of state, whose dominance is well established, intends to "put each institution in its place"¹⁴ and thus assure an institutional functioning more in conformity with the constitution, as he conceives it. This implies in particular that one strives to "play fully the parliamentary game."¹⁵

The first result of this concern is observed in the intense activity of the assemblies; it corresponds to the legislative implementation of the presidential promises, but also expresses the interest in associating the national representation more closely with the government's effort: the new resort to a vote of confidence on a particular aspect of this policy, energy (6 October) is symptomatic. The enthusiasm of a newly elected majority was thus able to give itself free rein and win the satisfaction of going a little bit further than the government imagined, even than the Elysee wanted¹⁶; the executive did not impose its point of view any longer systematically, it even resigned itself to some drafts which did not quite satisfy it, provided the essential was preserved: the assembly is henceforth freer regarding government bills, since the only restriction imposed on it is outlined by the presidential promises (but the latter are evaluated without appeal by the chief of state, as mentioned above.) When the threshold is reached, the government regains control of things, gets the group to conform and as was the case regarding the free radios 24 September and once again, energy on 6 October. In these two circumstances, however, the governmental positions included serious "inflexibilities" regarding the candidate's 110 proposals.¹⁷

But the more active participation of the national representation mainly concerns the assembly, while the Senate finds itself again in its position before 1974; it risks again experiencing "adversity," according to Jacques Georgel's expression and one can expect to see the deputies make the decisions more often by virtue of Article 45, paragraph 4. In the assembly itself, the beneficiary is the socialist group because of its hegemony. Institutional continuity has involved in this respect a spectacular change of roles, with the new majority adapting quite naturally the behavior of the old one, especially when the new opposition discovers the delights of procedure. Moreover, this continuity is combined with a political schism which irresistibly evokes the beginnings of the Fifth Republic: the ingenious Manichaeism of the "newly elected," their aggressiveness, their tactlessness, all this recalls 1959 and activist core of the JNR¹⁹ "rangers." Such a situation obviously does not favor the expansion of minority rights, despite the good intentions proclaimed. You might as well say that they turned sharply and among the latter, the

FOR OFFICIAL USE ONLY

main innovation (which, moreover, was not new, since the same scenario has repeated itself since 1973 at the beginning of each legislature) consisting in sharing the chairmanships of the committees: it collided with political reality.²⁰ Under the pressure of the socialist group, strong in its big battalions, one even went back on equal sharing of time for questions to the government, which had been set up in 1974 and the incident indicates perhaps the new trends. In the Anglo-Saxon concept of majority parliamentarianism, the majority expresses itself through the cabinet's vote, since it governs; but this model had never been completely adopted in the Palais-Bourbon because the institutional structure of the Fifth Republic maintains a separation which is not only legal but physical between the government and the deputies, although the majority, while supporting it, did not identify absolutely with the presidential executive. Henceforth the majority will demand an autonomy which it asserts with respect to the ministers, but which it mobilizes once again against the opposition.

The socialist group is, in fact, relieving the government in the conduct of the parliamentary battle; all during the summer debates, we have seen the chairman of the socialist group replace the minister responsible for relations with parliament to direct tactics, speed up the examination of documents, organize the development of the meeting and if Mr Defferre was anxious to be the assiduous spokesman of the deputies in the discussion of the decentralization proposal, it is the chairman and recorder of the committee who bore, with the support of Mr Joxe, the brunt of the burden of nationalizations. This reserve allowed the executive to let the relationship of forces shift in the chamber while wielding his constitutional weapons; thus he was not able to deny too fast the diatribes made against the obstructed vote and against Article 49, Paragraph 3, avoid resorting to it in his turn (but will he be able to do it for long?^{20a}) and he takes cheap credit for respecting parliamentary procedure.

However, this practice has some drawbacks because if the government refrains from using, under its responsibility, its constitutional prerogatives, the clarity of the discussion suffers from it and the majority is especially tempted to replace them with other restrictive procedures: thus for the first time, it seems, since the beginning of the Fifth Republic, cloture of the discussion of an article was applied (Article 57 of the regulation)²¹.

Consequently the plan which is outlined is based on a controlled autonomy of parliament; the deputies are no longer as strictly subjected to government tutelage and their agitation can superficially recall the Fourth Republic, but the function of leadership and control, in conformity with majority logic, appear mainly returned to the group: This sort of devolution is conceivable because there is the party behind the group.

FOR OFFICIAL USE ONLY

"The Link"

The socialist party seems to have the mission of maintaining the cutting edge of the ideological cleavages which the exercise of power tends to blunt. Far from seeking appeasement in the symbolic debates like that on nationalizations, its deputies in emulously referring to the class struggle and "schism" are playing a dual role.

They help, on one hand, to keep the communist party in the humiliated status it has known since 10 May, in pressing it in its field (the socialist deputies could not expose themselves to the charge of moderation or compromise with the right, without opening a breach in which the communist party would charge immediately) and in locking it in the dilemma of submission to majority discipline or solitary adventure (its defection would have no effect on parliamentary arithmetic): that is it for the left.

They have, on the other hand, a role in the presidential arrangement in mimicking the image of "radicalization" offered by Mitterrand as the only alternative to his policy and as the inevitable consequence of his failure: That is it for the right.

Freed from these burdens, the executive can then maintain its position and preserve the language of consensus (mystifying word with a dreadful hypocrisy before 10 May...). At Valence, the orators devoted themselves to a happening with a background of cut off heads, while the prime minister reassured a somewhat disconcerted opinion²² and on the next day it was the president of the republic who recalled on his return from Cancun "the right measure": "it is necessary that all the French, whatever they think, whether they are for or against my policy, feel really secure in the framework of the republic."²³ Consequently the French can ask the question? It is not very easy to reconcile the policy about which the chief of state said in his press conference of 24 September that it was "based on the union of the French" and the celebration of the class struggle. But these, after all, are only the two faces of a Janus policy²⁴ and this sharing of roles which General de Gaulle had practiced with Debre regarding Algeria is probably due less to a deliberate scenario than to the logic of situations. The novelty is that it puts on the stage an actor who has been absent until now in the distribution of the main roles: the party.

The reception of this phenomenon by the institutions of the Fifth Republic poses a problem, both for the administration as well as for the PS, as Jospin declared at Valence: "I hear it constantly said that the party must swing between the state--PS--it then becomes a colonizer--or the hobnailed boot party--it then becomes colonized. Let us not create confusion between the party and institutions."

FOR OFFICIAL USE ONLY

The warning is not unnecessary. Article 4 of the constitution assigns the function to the parties of contributing to the expression of suffrage, which means that their constitutional role is essentially electoral and that consequently they must not, as such, interfere in the activity of public authorities: it was a deliberate break with the practice before 1958 which considered the parliamentarians and even the members of government, as the representatives of their parties, subordinate in this capacity to the decisions of the leading organizations of the latter. Moreover, this concept did not proceed without disagreements and we know that the repeated conflicts which it created between the parliamentary group and the SFIO /French Section of the Workers International/ Executive Committee²⁵. As for the government, the chief of state settled things as early as the first council of ministers of his 7-year term²⁶, but there is a temptation for the deputies, indicated by the initiative of the PS Executive Committee on the occasion of the discussion of the draft bill on immigrants. The executive committee had ordered a deputy from the North, Derosier to amend the text to bring it "as close as possible to party positions" from which it considered the bill too distant; the minister had to negotiate not only with the reporter and the deputies, but also with the party executive committee. It is true that after this display of doctrinal vigilance, the latter adopted a draft acceptable to Defferre, but the fact remains that in interfering in the government's relations with the assembly, it had demanded a role which the constitution did not grant it²⁷.

No doubt, it will be objected that it is a question there of a quite juridical evaluation and that this point of view is based on fiction: does not everyone know that the parties are the decisive variable in parliamentary regimes²⁸? Membership in the latter determines the behavior of the actors, it takes into account their solidarity--and also their rivalries²⁹. But the objection is not relevant for it ignores the significance of what it treats as fiction; the distinction which the law makes between the public authorities and the free associations which are the parties ("the PS is not a cogwheel of the state, it belongs to society, Jospin observed quite rightly), does not aspire to describe all the facts, no more than it does not claim to deny an obvious solidarity between the participants: while reserving to constitutional procedures and organs the approval of this solidarity, it merely excludes confusion of types.

To explain the problems of the majority party in the institutions of the Fifth Republic, we must no doubt go back once again to origins, to the period where Mr Chalandon assured the impatient Gaullist militants that the UNR would play the role of a "link."³⁰ It does not matter that the image was based more on a wish than reality: the intention will be resumed with more probability and authority by Mitterrand in the message to the members of the congress at Valence where he stated clearly the PS's mission³¹.

FOR OFFICIAL USE ONLY

As "guardian of the program," in the words of its first secretary, the PS occupies with respect to the government and the parliamentarians the position of an ideological pressure group³². In providing the deputies with the reference for the program, it exorcises the specter of the "hobnail boot"³³ since their activity takes place within a broader perspective than the mere execution of presidential promises: Their role is not reduced to being the agents of a purely instrumental officialdom, it is connected with a joint enterprise of which the party is in some way the witness and the guarantee. Its existence justifies the legitimate questioning of an authority which they do not identify with, even if they are bound up with it, so that these deputies reproduce in their relationships with the government the relation typical of mass parties, of members with elected members. Reassuring for their convictions, this situation has, however, a centrifugal potentiality which brings up all the more keenly the question of authority in the party.

As an organization, the PS is an instrument for the mobilization of the deputies it includes as members and whose discipline it approves as elected members. Parliamentary performance and the votes of each elected member "are answerable to the group, the executive committee and the national convention," states Article 52 of the by-laws, while Article 17 of the group's internal regulation provides that "every member of the group who will have broken voting unity will be referred to competent PS authorities." And the first secretary reminded that if he did not claim to play the role of an arbitrator between the deputies and the government, the group chairman could appeal to the executive committee "in case of a problem among the parliamentarians" (see note 27). Since then, the strategic factor has been control of the apparatus. The "Mitterrand supporters" dominate it completely, so much so that the demarcation between the field of the party and the public authorities, which places the former outside the latter, is practically erased by the sort of "personal agreement" which is effected by the presence on the administrative committee of the secretary general and the assistant secretary general of the Elysee, as well as 14 government members and on the executive committee that of the chairman of the National Assembly and the group chairman.

The existence of a genuine majority party is going to create an inflexibility in the operation of the Fifth Republic whose extent is not yet foreseeable. This presence will contribute not only to preserving, but also to reinforcing the main variables in the regime; however, it introduces an element of uncertainty which states the dilemma of Mr Jospin: "State--PS or hobnailed boot party." Between the two which tendency will win the day? It could be that they will mutually strengthen each other, popular support and democratization of a political discussion restricted until then, characterized by the practice of the spoils system and institutionalized clientelism; it

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

finally depends on presidential arbitration provided for in Article 5 of the constitution whether the price to pay to establish this new phenomenon and complete the political modernization of the system remains within the limits of "the right measure"--if not of the golden mean.

Footnotes

1. The expression even escaped a chairman of the meeting and one had him observe that "we are still within the framework of the constitution of the Fifth Republic," Mr Nucci agreed with good grace: "You will excuse the old history professor, which I am, for having made this slip" (AN National Assembly debates, 29 July 1981, p 485). A deputy of the new majority even went so far as to speak of the "decadent regime!" (same, 27 October 1981, p 2633).
2. It is not very fashionable to crush the vanquished. Let us repeat then what was observed in this same No 9, namely that Giscard d'Estaing's 7 year term leaves a positive institutional heritage with respect to law and freedoms, with the innovation of the control of the constitutional council by the minority and the considerable development of the control of constitutionality which results from it, thanks in particular to the initiatives of the socialist group (see Mr Charasse, control the constitutional council, POUVOIRS, No 13). May one wish that on this point it does not involve an "episode"?
3. "Gambetta and de Gaulle, he added, had carried away and covered with their name and their prestige, what, in reality, was a coalition of parties," LE MONDE, 2 July 1981.
4. "But (...) if I am no longer among you, in the party, I remain with you, with our ideas and our hopes," LE MATIN, 2 July 1981.
5. This is why Chalandon, then UNR secretary general, described General de Gaulle as our "secret chief," LE MONDE 19 May 1959.
6. Speeches and Messages, V, Plon, 1970 p 247.
7. AN p 46. On this idea of "contract" see remarks of Mr de Laubadere, who publishes the text of "110 proposals for France" adopted by the Congress of Creteil 24 January 1981, AJDA expansion unknown, 1981 p 419.
8. "If it was necessary to go further than the commitments made, the message of 8 July continued, it could only be after the people, consulted again, had said the last word." In short, excesses and higher offers are excluded.

FOR OFFICIAL USE ONLY

9. Its distinguished from the preceding presidency, there is, nevertheless, at the secretariat an adviser, assisted by two associates, who has relations with parliament among his responsibilities.
10. Quoted by A Peyrefitte, the French Sickness, Plon, 1976, p 355.
11. LE MONDE 13 October 1981
12. NOUVEL OBSERVATEUR 31 October 1981
13. For example, regarding the large scale Parisian city planning operations, the "striking presidential move" cancelling the defense vanguard project (LE MONDE, 19 September 1981), or the taxing of works of art (same, 31 October).
14. Press conference of 24 September 1981: "I would like to put each institution in its place again: the government governs, the parliament legislates and participates in discussion, without restraint of any kind."
15. The idea is Mitterrand's on returning from Cancun, quoted by LE QUOTIDIEN de Paris of 26 October 1981.
16. Thus the Pierret amendment on gifts-shares on 16 July, the Suchod amendment of the amnesty bill on the 29th. Contrary to a discipline of amendment, the government upheld the elimination of the student quorum in the university elections, although the text adopted by the Senate would have offered it the opportunity to correct an innovation considered unwise in the Elysee (16 September and "last word" on 2 October); it finally negotiated with difficulty the regulations about expulsion of foreigners on 30 September.
17. The term is Jospin's. LE NOUVEL OBSERVATEUR 17 October 1981.
18. The chairman of the communist group, Mr Lajoinie, complained several times about the privileged relations between the socialist group and the government: such an "arrangement" is "a not very recommendable and unconstitutional practice" (LE MATIN 2 October 1981); we must avoid "limiting dialogue to a single group," LE MONDE 15 October 1981.
19. The reconciliation was made by Georges Mamy, LE NOUVEL OBSERVATEUR 31 October 1981.
20. The committees prepare the legislative decision which is set down in a policy; when the ideological positions are strongly opposed, it is hardly practical to entrust to the minority the

FOR OFFICIAL USE ONLY

duty of directing the work of the majority and the German example which is always invoked, is both exceptional and irrelevant, with nine-tenths of the laws developed under these conditions being adopted unanimously by the Bundestag (Mr Fromont, POUVOIRS, No 16, p 148): Only such a consensus allows the association of the minority with the responsibility of legislation.

- 20a. This article was drawn up before recourse to the regulations of Article 38.
21. 23 October 1981: see the "French Constitutional Chronicle" following.
22. "I will not take any action, I will not take any initiative which may threaten our national community," asserts Mauroy, LE MONDE, 27 October 1981.
23. LE QUOTIDIEN DE PARIS 26 October 1981.
24. On an embodiment of our traditional schizophrenia which Waldeck-Rousseau already observed: "We have two brains: one (...) very bold, very adventurous. We have another one, very reflective, very calculating" (speech of Saint-Etienne, 11 March 1895).
25. See the LE JOURNAL DU SEPTENNAT of V. Auriol, A. Colin, 1949, p 349 and 388
26. Constitutional Chronicle, POUVOIRS No 19, p 183.
27. LE MONDE, 1 and 2 October 1981. Jospin had to correct fire by declaring that the party executive committee does not act as an arbiter between the parliamentary group and the government. It is not resorted to by the chairman of the group, except in case of a problem between the parliamentarians. Then it is the executive committee which decides. The PS is not a cogwheel of the state, it belongs to society..., LE NOUVEL OBSERVATEUR 17 October 1981.
28. J.-Cl. Colliard, Contemporary Parliamentary Regimes, PFNSP, 1978.
29. Including within a same group: one knows about the deals between the PS factions, which the formation of committees has given rise to in the assembly in July 1981 and the ordeal to which it has subjected the arbitration authority of the group chairman. Moreover, the cleavages are reflected in the government with the conferring of the title of secretary of state on the leaders of these factions (without forgetting the PCF representative).
30. LE MONDE 14 February 1959.

FOR OFFICIAL USE ONLY

31. "Main force of change, it must be capable of explaining, clarifying the government's decisions and convincing. But it also must convey to the government the message it receives from the social classes where it has been able to establish its roots, express their demands, their fears, their hopes. It must finally mobilize the popular masses so that they all take their place in the movement," LE MATIN 26 October 1981.
32. And sometimes corporative: the first secretary confirmed that the PS was opposed to the quota for UNEDIC expansion unknown officials, LE NOUVEL OBSERVATEUR 17 October 1981.
33. "The hobnail boot is a fine and good shoe." Chevenement observed, however at Valence, in comparing it with "dancing shoes," LE MATIN 26 October 1981.

COPYRIGHT: Presses Universitaires de France, 1982

8490

CS0: 3100/348

FOR OFFICIAL USE ONLY

POLITICAL

FRANCE

LEFTIST AUTHOR ON U.S., FRENCH, SOVIET THIRD WORLD POLICY

Paris LE NOUVEL OBSERVATEUR in French 2-8 Jan 82 pp 14-19

[Interview by Louis-Bernard Robitaille with Cornelius Castoriadis, author of "Devant la guerre"; date and place not specified]

[Text] The day after this interview took place, General Jaruzelski's tanks fanned out over Warsaw--an extremely caricatural illustration of the theses of Cornelius Castoriadis. In his view, indeed, the party is an historical cadaver in the Soviet empire: it is the army that holds both the reality of power and its ideological extension. One can easily imagine that such thinking is far from unanimity on the left. But Castoriadis is used to being a lone rider: in 1945 as today, he has asserted himself as a revolutionary intellectual and has denounced the bureaucratic totalitarianism of the USSR. The review that he subsequently founded with Claude Lefort bears a name that is famous today: SOCIALISME OU BARBARIE. A philosopher, psychoanalyst, economist and director of studies at the Practical School of Higher Studies, he has just published a book with a provocative title: "Devant la Guerre" [Before the War] (Volume 1, Fayard), in which he analyzes the "stratocracy," the enormous military machine that aims at nothing less than "domination of the world." He explained to Louis-Bernard Robitaille the political extensions of his analyses.

[Question] You have just published a book with the title "Devant la Guerre." A bit alarmist, isn't it?

[Answer] I started from a very important and quite real fact: the invasion of Afghanistan at the end of 1979, following shortly after the collapse of the shah's regime in Iran, all of this manifesting a nearly total breakdown of American policy on the world scene. I began by writing an article for the review LIBRE, which provoked violent discussion in the committee and caused stoppage of publication. But the thinking I had begun with regard to that article led me to go back over all the analysis I had done on the USSR for long years, since I started working on the Russian question in 1944. I have always considered that it is the key to understanding of contemporary history. How could a revolution that began as a socialist revolution have engendered this regime that I call total and totalitarian bureaucratic capitalism? And also: how does it happen that such a regime can perpetuate itself?

[Question] In what way did the invasion of Afghanistan radically change the picture?

FOR OFFICIAL USE ONLY

[Answer] It brought to light, in a striking manner, not only the Soviet Union's military capacities but also its political-strategic capacities. It brought to the forefront this phenomenon: that this country that showed such power on the military level was the same one that had not managed to solve, on the domestic level, some basic problems which, more or less, some countries so poor at the outset and so poorly run as Greece or Spain have nearly solved. How, then, can this country produce enormous ultramodern equipment capable of rivaling that of the world's No 1 industrial power, the United States?

[Question] That is to say: how does it happen that there is a shortage of butter in Moscow, the tractors are always breaking down on the kolkhozes, etc, but the USSR produces and can put into operation ultrasophisticated military materiel?

[Answer] Exactly. It is also astonishing that the thousands of official Sovietologists paid by the taxpayers of the West have practically never raised the question.

[Question] But the reason is probably that great quantities are involved. There is enormous waste in production.

[Answer] I reject the wastage theory--in other words, that they make 10 computers, throw away 9 of them and keep 1. If you apply this thinking to Russian armament, it is really a lot, and it would have to exceed the world's production of steel. That is not possible. It is therefore necessary that in the military-production sector there be a productivity, an output, on standards totally different from what one finds in the other sectors. Which led me to go back over my entire analysis of Russia, in the economic and sociological areas--and, for example, to examine this phenomenon, known but passed over in silence by the Sovietologists: that of the closed, secret enterprises, placed under the control of the army. There are two distinct economies: the first, incapable of producing enough wheat or shoes of acceptable quality; and the second, mass-producing ultrasophisticated materiel, the hundreds of thousands of spare parts necessary, the high-precision machine-tools, etc. Which presupposes, upstream and in parallel, a veritable military society that has its privileged and motivated workers, its own technicians and scientists. Which leads me to speak of stratocracy.

[Question] You mean to say that behind a thin facade, that of the Communist Party, the army has finally taken over power in the USSR?

[Answer] No, it involves a new phenomenon. The USSR is truly a new historical animal. In effect, this military society--employing perhaps some 25 million persons--has a dominant position in a country in which the party has become an historical cadaver. Since the demise of Khrushchev, that last deluded illusionist, the party has had no more to say, nothing to propose to society. Not about achieving the earthly paradise or even about "outstripping capitalism," as Khrushchev proclaimed. The only ideology that can still be proposed to the populations--or rather the only imaginary one that survives--is nationalism, incarnated precisely by the army. The aim of power, of world domination. Under cover of the "triumph of socialism," of course.

[Question] Your second major observation is the fact that world policy will be dominated in the coming years by the Soviet-American confrontation. That does not seem a particularly new phenomenon.

FOR OFFICIAL USE ONLY

[Answer] Of course not. In 1949, in SOCIALISME OU BARBARIE, we were already analyzing this reality and we evoked the possibility of a world war between the two systems of exploitation. At bottom, we were right. Also as regards the liberation struggles that followed in the Third World--confiscated, for the most part, by the Russians. Also as regards the great social movements in the West. These phenomena that for a time helped to mask the essential fact of this confrontation. But here it is again today, and at a far higher level. This perspective shapes all the rest today. To such an extent that the entire problem of the Third World, as monstrous as it is, is annexed by it, becomes a subsidiary, a chapter of this confrontation. This is an observation of the first importance, and one which apparently is not self-evident--at least to the people who are close to me, who have a leftist past, who continue to take the point of view of a radical transformation of society.

They are swimming in a soup of illusions concerning the countries of the East and Russia in particular. They refuse to see that we have before us a new social-historical formation, a new historical animal. They are still trying to analyze in the light of the past: worker state degenerated by the Trotskyites, state capitalism, etc. Or else they stay with the "classical" concept of totalitarianism, which is entirely inadequate for understanding the Russia of today. Others--liberals, for example--are counting on a flexibilization, a "modernization" of Soviet society through trade and economic exchanges. This has absolutely not proved out. It is for that public that I wrote my book. And unfortunately, I fear that it remains completely deaf.

[Question] Why?

[Answer] Because even when it has been granted, for the sake of conversation, that the USSR is not socialism, there is difficulty in conceiving that it is a regime of domination such as has never before existed in the history of humanity. For the first time in history, there is a regime without faith or law, not even for its own citizens or subjects. This has never been seen before. The Mongols doubtlessly did not have either faith or law when they invaded, pillaged, occupied foreign countries. But for themselves, they had their religion, or rather they had 14 successive ones. All conquerors have always said "woe to the vanquished!" But for themselves, they preserved a faith and a law. From this point of view, Russia constitutes a new historical phenomenon.

[Question] Should lack of imagination be quite simply added, then, to ill-digested deception?

[Answer] Yes, but there is another factor, one that makes the moral atmosphere heavy and that is probably the most decisive one. The people who view themselves as militant, lucid, continue to function in a theological-Stalinist mode. They are not interested in knowing whether /that/ is a pack of cigarettes; they begin by looking around and they say to themselves: if one grants that /that/ is a pack of cigarettes, one comes to that conclusion. But /that/ conclusion is very disagreeable to us and we do not want any of it. It is not that it is false; it is that we do not want it. Therefore: it is not a pack of cigarettes but a degenerate workers' state! God knows but that such reasoning has had a hard life. If you say that God does not exist, then anything is permitted. Intolerable! Therefore, it is necessary for God to exist.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

Another example: one does not like the idea of a Third World War. And the entire left is disarmed by that question; and if it were true? What position would one have to take? The people of the left have nothing to say on the subject. The only thing that enables them to go on prattling is to say that there is an American imperialism, warmongering, and furthermore that it is the strongest, that the Russians are in a defensive position, etc. Which frees them of the obligation to face up to the actual situation.

[Question] There is refusal to see this new animal--a rather maleficent one, you say. Which means: at bottom, things were much better when the United States had absolute supremacy in this world-scale confrontation. I conclude from this that in the present debate, you believe that the United States, the West, should rearm in the face of the Soviets.

[Answer] I have never said, I will never say that the West should rearm. First of all, it is not my role to say to the capitalist governments what they should or should not do. With that point made, no one ever thought, when the United States had absolute supremacy on the nuclear level--for some 20 years--that it was going to nuclearize Russia "before it was too late." No one ever thought so, and rightly --except for a few bizarre personages, of course, who urged it and had no chance of being listened to. Why? Not because one attributes superior moral qualities to the Pentagon. Quite simply--and this is where traditional Marxism becomes a fantastic machine for wrong thinking--because the United States is not simply a capitalist and imperialist country. I call it a liberal oligarchy. That means something: it means that there are controls, a budget, a public procedure, a public opinion, actions and reactions by the population. It means that those who govern cannot do just anything at any time. One forgets a little too quickly what stopped the Vietnam war: it was public opinion, the American people, the students, the soldiers who chucked grenades into the officers' messes. This situation is still there, in the United States--as in West Europe. But it absolutely does not exist in Russia. The decision whether or not to unleash a preventive nuclear attack is entirely in the hands of some 10 or 20 persons who run the Russian establishment, who do not have to account to anyone and who fear nothing domestically.

[Question] In short, as between the Soviet "stratocracy" and the American "oligarchy," the former is the more dangerous.

[Answer] Most people of the "left" are dominated by the Marxist theorization by which a regime is defined essentially by its economy. That is: the Western countries are only capitalist; everything that might happen on the political level is secondary, it is decoration, sauce, mayonnaise. There is a class structure, therefore these regimes are to be fought unconditionally. This position is a false one.

What is the reality? From the point of view of political theory, these regimes are effectively oligarchies. But if one speaks of the societies, one has to admit that they are not capitalist societies pure and simple. If they were truly capitalist, this would be the world of Charlie Chaplin's "Modern Times," it would be a totalitarian regime inherent in the organization of the capitalist factory, extended to the whole of society. But this is false. Why? Because these societies are historical bastards, generated both by the development of capitalism and by all the liberation, emancipation movements that were already beginning in the European cities in the 14th century and that took on all the forms that we know of, includ-

FOR OFFICIAL USE ONLY

ing the form of religious movements. There were the revolutions--English, French, American--and the workers' movements; there has been the great revolutionary democratic movement that is lasting for centuries and that means that these societies have not been able to become simply what their economies were leading them toward. They have not been able to be purely capitalist societies, which would have meant totalitarian societies.

[Question] You say, on the contrary, that there are two or more logics operating.

[Answer] Precisely. There is on the one hand the logic of the capitalist economic institution of society, and on another hand, the logic of the revolutionary democratic movement that has always been there.

[Question] Furthermore, it is this contradiction that creates the weakness of these societies.

[Answer] Ah! Of course, if for these societies it were a matter of waging a war against a regime which for its part is purely and simply totalitarian-bureaucratic, it is obvious that that would create a situation that is not a simple one. These countries have found themselves, since the end of the last war, in a phase of decomposition, progressive and accelerated. It happens, for example, that these "oligarchies" are incapable of defining a rational and coherent policy--even from the strict point of view of their long-term interests. This is a phenomenon that the Marxists, here again, refuse to recognize, for they are living in the mythology of a rational capital that pulls all the strings, which would be perfectly rational. In fact, there is a fantastic incoherence--at the level of relations between states, for example, or in the so-called Atlantic Alliance, which is anything but an alliance, or at the level of American armaments policy, which is also of a fantastic incoherence. It is made up of fits and starts, under the various pressures of the military-industrial lobbies, without its corresponding to any military and strategic rationality.

The Western societies are like thick soups in which swim some pieces that are a little thicker than the others: in particular, the lobbies. The official "workers'" movement, the institutionalized "workers'" movement, is itself one lobby among others, without any overall political platform.

[Question] At what moment--let's speak of the United States--do you place this process of decomposition?

[Answer] The point of cleavage is in the 1960's, with the considerable ambiguity of the results of the great social movement (blacks, young people, women, etc), but one that was not followed through all the way. That movement modified the Western societies, it shook them. But in subsiding, it left them in this state of decomposition, without any real sequel. Today there is no longer any movement going forward and wanting to transform society. The movement of the 1960's shook the dominant point of view without managing to impose its own.

[Question] In situating the problems at so high a level--or in diving so deep--you do not make it possible to perceive much in the way of solutions.

[Answer] But it is because the question is really difficult. One has to see that there is no reason to defend these Western regimes. But there are not only the re-

FOR OFFICIAL USE ONLY

gimes, there are also the societies, and they contain what remains of the great democratic and revolutionary tradition of transformation of society, and that is no small thing, and it does not go without saying. One does not know whether this tradition continues, in an underground way, to exist in Russia. Therefore, entirely independent of Reagan, the question of the defense of these societies against the Russian stratocracy could arise. In a sense, it has arisen. It is a moment of reasoning which, of course, the Marxists and others will object to, crying "Sacrilege!" This is a point that has to be given close attention: first of all, it is not true that there is no choice to be made between the Western societies and a Russian-type regime.

[Question] Between two gangs, then, one must in effect choose the lesser....

[Answer] No, it is no longer a matter of gangs but of societies. Let us note in passing the hypocrisy of all these people: I see no one applying for a visa to emigrate to Russia. I've never seen such a thing! But the question is that, on the one hand, this is not the role of the people who presume to give advice to the general staffs, still less to Reagan, who takes the bread from the mouths of old women in order to make weapons which, for that matter, serve no useful purpose. And on the other hand, that the societies are not alone in the world. There is the whole Third World, and to begin with, the Third World where the Russians have not yet entered.

[Question] In your judgment, is that where the game is being played, and crucially?

[Answer] Yes, that is the main arena of the confrontation. And what is happening there? Many of those countries are under the direct influence of the Western countries, the United States in particular. And what is the U.S. policy? To support, in practically all cases, the most reactionary, the most authoritarian regimes. We note in passing Mrs Kirkpatrick's subtle distinction between totalitarian regimes and authoritarian regimes: actually, it is not false. Indeed, the regimes of the Third World are rather "authoritarian" than "totalitarian." And so? Is that a reason for aligning with governments that support all the dictatorships of Latin America wherever they exist, who train torturers in the CIA camps in the United States and who now are doing what they are doing in El Salvador? Who not only are incapable of solving the problems of the Third World countries but are also systematically supporting regimes of authoritarian dictatorship?

[Question] But what strategy for the West, then? What had to be done, what has to be done, in Nicaragua, in El Salvador?

[Answer] The idea of the third way, as it is presently being advocated in France, is illusory. These are pious wishes, in the present state of affairs. For it is not by chance that the United States has this irrational policy, from the point of view, properly understood, of the American imperialist interests themselves. While it is not entirely true that the Americans pushed Cuba into the arms of the Russians, it is true that they are in the process of pushing Nicaragua into their arms. This is not by chance; it is the very result of this decomposition of American society. There is no body in the American regime capable of rising up against what a Marxist called the point of view of the general interests of the dominant system.

FOR OFFICIAL USE ONLY

What prevails is United Fruit, it is the military lobbies that sell airplanes, train colonels, etc. It is this or that company, it is the various CIA clans who each have their preferred dictator, etc. Take South Africa--5 million whites, and 18 million blacks kept practically in a state of slavery. A sort of immense concentration camp for the blacks. There is a black movement, that has its ups and downs but seems to be getting more important. One day or another, these blacks will rise up--at least one has to hope so, desire so. They will rise up. The whites are armed to the teeth and more. These blacks will need weapons. Who will supply them? The American administration is aligned with the Pretoria government more than ever. What will happen? The blacks will ask for weapons from the Russians, who will be delighted to supply them. The Cape as a Russian military base--now that is worth something in the relationship of world forces! When that moment comes, we will be asked, in the name of defense of democracy and liberty, to support the Pretoria regime against the blacks because they have Russian weapons.

This is one of the reasons why I refuse to go into the question of whether an absolute war effort by the West has to be supported. Contemporary war is a total phenomenon: what does that mean? For example, in France, for a logical military leadership, it means indexing 40 percent of the population. Because about 40 percent of the French have at one time or another been members of the Communist Party, or their wives or sons have.

This would mean, in a series of European countries (Spain, Italy, etc), transforming them into semitotalitarian regimes, with a foreign policy to suit, in order to fight another totalitarian regime. This is absolutely absurd, untenable, unacceptable.

[Question] Don't you have a tendency to pose the dilemma or impasse in an absolute way? Couldn't there quite simply be, for the West, a technical response that would consist, on the level of hardware, in filling in the most obvious gaps in the relationship of military forces--and first of all, the question of the SS-20's in Europe? We are a long way away from an all-out war effort.

[Answer] But here again, the confrontation is not going to evolve in the conventional way. The Americans had already managed to learn nothing in Vietnam. As if they had never heard of the Algerian war. They made war in Vietnam as if they were doing ultratechnologized maneuvers on the great plains of the Middle West, but in the Vietnamese jungle where one couldn't see 2 meters in front of oneself.

[Question] Could--or should--things have happened differently in Vietnam?

[Answer] I don't know. That is not my problem. They could not in any way hold Vietnam. And what were they getting their noses into in Vietnam? What I want to say is that the Americans thought it was possible and intelligent to carry on an industrial war in Vietnam, by massive injections of materiel and dollars. And today they think it is sufficient to pass budgets, produce new tons of hardware, whereas the confrontation is essentially social-political. Hardware will not make war, but rather people and societies--with, for the Third World, the national ingredient.

[Question] And communist ideology.

FOR OFFICIAL USE ONLY

[Answer] Yes. This communist ideology, which is completely bankrupt in Russia, which no one believes in for a second, this ideology, at the same time that the organizational model of the militarized party, the great creation of Lenin, still continues to be of value in the export markets. And first of all, of course, in the countries of the Third World. Why? Because if you go to Latin America, for example, the most stupid, most lifeless, most idiotic versions of the most primary Marxisms are verified directly. There are rich and poor, the poor drop from hunger and the rich are very rich, they have the means of production and they expropriate the few lands that the peasants have. The state? What state? The local police are totally under the orders of the local landowner. The local priest--he has been changing a bit for some time, but for centuries, his line was: "My children, keep calm, the poor will inherit the kingdom of heaven!"

[Question] A veritable caricature, in short.

[Answer] Yes. The most asinine caricature of the most insipid Marxism seems to be verified there. Into this explosive mixture you throw a few copies of the Marxist catechism, you throw a few enzymes of an organizational model....

[Question] Then in the last analysis, and whatever its motives, the USSR finds itself playing a progressive role in those countries?

[Answer] But in order to do what, in the last analysis? What is happening now in Vietnam? A totalitarian bureaucratic society that is not solving the population's problems. Of course, these Third World populations are desperate, they have an enemy, a solution appears in the form of a national front manipulated by the communists or supported by the Russians (because they are the only ones to give it aid). The struggle begins. The Americans, of course, support the opposite camp. Anti-Americanism, already existing, develops to the point of paroxysm. This is entirely natural. The people do not know what is coming afterward. But we--we know. Some say it is better. I do not agree.

[Question] The question is this: for Cuba, was Castro or Batista better?

[Answer] What is the situation in Cuba? There is a fantastic number of people in the prisons. The material conditions--despite the enormous subsidies that the USSR gives--are miserable.

[Question] Your point of view appears both pessimistic and disheartening: no alternative for the Third World except the status quo or Sovietization.

[Answer] Is it pessimistic to observe an auto accident or a natural catastrophe? Nothing that the Western countries are doing or can do is going to change the situation.

[Question] Isn't it a little facile to decree in advance that no policy for development of the economy and of democracy exists for Latin America?

[Answer] But listen! Give me an example in which the Western countries have succeeded with this "third way" policy! Kennedy made the Alliance for Progress: what was its fate? Even Carter--it is entirely right if he did not intervene in Nicaragua! Why? Because when one starts talking about a different policy, there are

FOR OFFICIAL USE ONLY

airplane and tank manufacturers who block the process. Or within the countries themselves, ruling classes who block things and find support, in the CIA or elsewhere.

[Question] But all the same, isn't it worth the effort to try, as Mitterrand did in a way, to push for a solution in El Salvador?

[Answer] But it is very well to find a solution on paper. Linking economic aid to the democratization process, etc. But concretely, France has no clout in Central America. It has in Africa. But what does Mitterrand do? He supports Mobutu! It is not that he likes Mobutu, to be sure, but he does not have the means for any other policy. There or elsewhere, there could theoretically be something else, but that is not going to happen with the present Western regimes and with the policies they are conducting. The situation therefore remains essentially the following: Russia is trying to penetrate the Third World, and the Third World is an excellent terrain for penetration. Even if it sometimes suffers a setback, as in Egypt. One cannot conduct an enterprise of world domination such as the USSR is conducting without suffering setbacks from time to time. And it will suffer more. Already in Afghanistan, it is not a triumph for them, it is obvious.

[Question] What is the scenario that you conceive?

[Answer] I don't do futurology; but let us examine an hypothesis. Let us imagine one crisis or another in such-and-such country of the Third World. The Russians or a pro-Russian regime is installed, or simply a regime that the Americans perceive to be such. Sooner or later, there will come a situation that will be objectively critical or considered to be such.

[Question] For example, Iran.

[Answer] It could be Iran, or South Africa. It could be Africa, if Qadhafi were not so weak as he is and if there had been a real descent of the Libyans toward the heart of Africa. All the African countries except for one or two are in a fantastic state of instability. They are pasteboard states, Mobutu is kept at arm's length by the Westerners, etc. Therefore, at a given moment, the Pentagon, the United States will react. If they do not react--for example, in an absolutely decisive matter such as the Gulf--it means capitulation. If, in a key country, there is an upheaval and an Islamic-popular-nationalist-revolutionary government declares "I am keeping my oil!", Europe shuts down in 24 hours.

The United States would no longer have any choice but to react or capitulate in fact and withdraw to its own territory. Or else they react: ultimatum, military action, etc. At that moment, effectively, the European front becomes important. The Russian general staff knows quite well that if things turn bad, the principal place of confrontation becomes Europe. If South Africa is at stake, then you can suppose that there will be an attack on the Elve.

[Question] But you say in your preface: "The Russians do not want war, they want victory." What does that mean?

[Answer] That the Russian general staff is not completely mad. Even if human lives are not accounted for as they are in the West--as was seen in the course of

FOR OFFICIAL USE ONLY

WW II--it knows quite well that total war means 100 or 120 million Russian dead. Even for them, that is a lot. What they are aiming for is victory--that is, the internal collapse of the others, under maximum pressure. This is the explanation for the Russians' fantastic overarmament--an overarmament that cannot have only the effect of putting Russia "under shelter." For on such an hypothesis, now that conventional supremacy is crushing and overkill has long since been achieved, why continue this enormous military production? Why a constantly growing fleet, when Russia does not need it for its defense? Because this overarmament has a decisive psychological value in the confrontation. The Westerners, though armed, will find themselves in the position of a man facing an adversary who pulls out a knife. then an axe. Next you discover that he also has brass knuckles and a revolver and that he is a karate champion! That's quite a bit; so then you capitulate. One should not have any illusions about the American deterrent force. Imagine that there is a Russian first strike: the only possible American response would consist in hitting the Russian cities, which would in turn lead necessarily to destruction of the American cities. Now apart from the extreme cases (Hitler in his bunker), who is the person in a position of political responsibility about whom one is sure that he would take such a decision? All this, as Herman Kahn said, is to "think the unthinkable." But in this perspective, one has to think about a "victory without war."

[Question] In the face of this situation, it is impossible for you to avoid this question: is it really necessary to have a strategy for the United States, for Europe, for the West?

[Answer] We do not have to put ourselves in the shoes of the politicians, who take decisions in accordance with their own logic. Nor give advice to Reagan, who does not know what he is doing and does it poorly. Rearmament, in the form it is presently taking, is an absurdity and does not interest me. I am not a "pacifist." I consider the present European pacifist movement politically absurd and morally abject. What do the pacifists say? "Denuclearize, from Poland to Portugal!" Which means: the Russians and the Americans can nuclearize to an extreme, who cares, so long as our precious little hides are saved! This is politically imbecilic and morally unacceptable.

My point of view is that a popular movement must be organized for universal and total disarmament and for allocation to the Third World of the \$500 or 600 billion spent on armaments each year. It doesn't matter how. Not to the profit of the local petty tyrants, psychopathic demagogues, in order for them to build armies in their turn, but for development of agriculture and infrastructure.

[Question] All the same, I gather from your book that you consider the present imbalance totally irreversible. Which seems enormous.

[Answer] It is unthinkable that the United States could cope with the military-political-strategic challenge without restoring the draft, abandoned under Nixon. But that is politically out of the question. At present there is a volunteer army, insufficient on the quantitative level--the warships are short of personnel--and on the qualitative level: the recruits, essentially unemployed persons, are not well-qualified enough. Secondly, people are reasoning by the criteria of the 1939-1945 war, when the United States effectively built up a formidable war industry in 2 or 3 years. If there is a confrontation and serious crisis in the present era, the time will not be counted in days, weeks or months, but in hours.

FOR OFFICIAL USE ONLY

[Question] Many maintain that the United States, with its fantastic industrial potential, would in fact have the means to bring the Soviets to their knees, by imposing on them an armaments race that their economy could not support.

[Answer] This would suppose, on the part of the United States, an armament effort that seems to me, for the time being, entirely improbable. On the Russian side, the sums devoted to armament are already estimated at between 15 and 20 percent of GNP. And at present, these expenditures are increasing by 5 percent per year in real terms. Even in the face of an enormous American effort, the Russians would have the means for coping, with additional expenditures that would represent less than 1 percent more of their GNP. And they will do it.

[Question] Don't you think, in view of the population's already miserable standard of living, that in the event that more blood is drawn out of the civilian economy, there could be a gigantic revolt?

[Answer] I do not think that the quantity of blood drawn off would really make the difference. With that point made, what is of capital importance for the future of our world is to know whether or not there are democratic traces left in Russia. Of this, we are totally ignorant. It is true that Russia's internal situation is one of the most explosive there is: none of the problems posed under the old regime has been solved--that is the least that can be said. But at the same time there is a leaden blanket that pins society down. Even apart from the Stalinist terror, the regime has perfected a fantastic system of repression. Even though I do not share his conclusions at all, Zinov'yev was correct in stressing this "homo sovieticus," a new species of human, in a way, cynical, indifferent to the shabbiness of his lot, to the future of society--provided that he be given his peace, more or less. The whole question, for the future of Russia--and to a great extent, ours too--is whether the dissidents are the tip of an iceberg or the representatives of a disappearing race.

COPYRIGHT: 1982 "le nouvel Observateur"

11267

CSO: 3100/337

FOR OFFICIAL USE ONLY

MILITARY

FRANCE

SALES, PRODUCTION STATISTICS FOR MILITARY AIRCRAFT UPDATED

Paris AIR ET COSMOS in French 20 Feb 82 pp 15, 17, 19, 20

[Article: The Programs of French Industry"]

[Text] In order to inform its readers better about the nature and magnitude of the production of the French aerospace industry, AIR ET COSMOS presents below five tables that summarize this activity. These tables give the principal industrial and commercial characteristics of the programs for aircraft (civilian and military airplanes and helicopters), for engines and for missiles in which the national industry is significantly involved, for which mass production has already been started or is still in progress, or on which potentially important development is being done. These data make it possible to quantify these programs and to present their status in terms of orders, deliveries, rate of production, clientele, exportation.

Complementary data:

- 1980 aerospace turnover: Fr 35 billion (consolidated); Fr 43 billion, not consolidated;
- 1980 exports: Fr 20.5 billion;
- order book as of 31 December 1980: Fr 91 billion;
- export orders taken in 1980: Fr 27 billion;
- direct jobs: 110,000 persons;
- indirect jobs: 120,000 persons.

Principal personnel strength (as of 1 June 1981): SNIAS [National Industrial Aerospace Co] (group): 39,000; SNECMA [National Aircraft Engine Design and Manufacturing Co] (group): 19,800; Dassault-Breguet: 15,800; SNPE [National Powder and Explosives Co]: 6,500; Turbomeca: 4,400; Matra: 3,500; SEP [European Propellant Co]: 2,500.

Notice: For each program, the principal information is given as it is known to the editorial staff of AIR ET COSMOS as of the "situation" date given. In addition, there may be differences of definition from one manufacturer to another (for example, is "delivery" made at the end of the assembly line, upon delivery to a subsidiary or to the end-customer?, and so on). Finally, publication of certain data may be restricted for reasons of industrial secrecy or for national-defense reasons. This means that the information presented below may be incomplete or indicative only of orders of magnitude.

These documents will be updated regularly by the AIR ET COSMOS editorial team.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

(5)										
(11)										
(12)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										
(16)										

(1) + = options possible. (2) + means upward; = means stationary; - means downward. (3) Most recent date on which at least one of the elements in the line was updated. (4) Information not communicated by manufacturer.

Key:

- | | |
|----------------------------|----------------------------------------------------|
| 1. Helicopters | 9. Number of countries |
| 2. Program | 10. Export % (as number) |
| 3. Function | 11. Situation Date |
| 4. Manufacturers | 12. Notes |
| 5. Orders (firm + options) | 13. Mixed civilian and military |
| 6. Delivered | 14. Civilian + Gendarmerie |
| 7. Monthly rate | 15. Crane |
| 8. Trend | 16. Not including manufacture abroad under license |

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

(1) AVIONS MILITAIRES				(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Programme	(2)	(3) Fonction	(4) Constructeurs	Commandes (1) (Firme + options)	Livres	Cadence mensuelle	Tendance (2)	Nbre pays	% export (en nombre)	Date de situation	Remarques
Transall		Transport	Aérospatiale + MBB (22)	31	2	1*		2	10	10-02-82	(13)* 0.7 en 1983 Relance
ANG		Patrouille maritime	Dassault	42	—			1	—	31-12-81	(14) Prévision France Marché non signé
Mirage 2000 ..		(18) Combat (19) Multimission	"	75*	5	—	+	2	27	15-02-82	* Négociation des contrats (15) en cours - 7 protos
Mirage 3, 5, 80		"	"	1 408	1 348	3	=	22	70	31-12-81	
Mirage F1		"	"	648	485	5	+	11	60	31-12-81	
Jaguar		(20) Combat Appui	Dassault + BAe (23)	532	447	4	=	5	65	31-12-81	
Super Etendard		Aéronavale (25)	Dassault	85	63	1.5	=	2	16	31-12-81	
Alpha Jet ... (21)		Entraînement + Appui	Dassault + Dornier	500 +	325	5.5	+	10	60	31-12-81	(16) 1 proto 3 avions présérie lancés
Microjet 200 ..		"	Privé + (24) Marande Av.								
Esillon		"	Aérospatiale	30	—	—		1	—	1-02-82	(17) 2 protos

(1) + = options possible. (2) + means upward; = means stationary; - means downward. (3) Most recent date on which at least one of the elements in the line was updated. (4) Information not communicated by manufacturer.

Key:

- | | |
|----------------------------|-----------------------------------------------------|
| 1. Military Airplanes | 13. 0.7 in 1983. New startup |
| 2. Program | 14. Forecast for France. Contract not signed. |
| 3. Function | 15. Contract negotiation in progress - 7 prototypes |
| 4. Manufacturers | 16. 1 prototype - 3 preseries planes started |
| 5. Orders (firm + options) | 17. 2 prototypes |
| 6. Delivered | 18. Sea patrol |
| 7. Monthly rate | 19. Multimission combat |
| 8. Trend | 20. Combat support |
| 9. Number of countries | 21. Training + support |
| 10. Export % (as number) | 22. MBB [Messerschmitt-Bolkow-Blohm] |
| 11. Situation Date | 23. BAe [expansion unknown] |
| 12. Notes | 24. Private + Marmande Aviation |
| | 25. Navy Air Force |

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

(1) TURBINES A GAZ			(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(2) Programme	(3) Fonction	(4) Constructeurs	Commandes ferme + options (1)	Livres (6)	Cadence mensuelle (7)	Tendance (2) (8)	Nbre pays (9)	% export (en nombre) (10)	Date de situation (3) (11)	Remarques (12)
CF6-50	20/25 t civil (13)	GE/Snecma	555	(10)	(10)		22	77	31-12-81	A 300
CF6-80	15/20 t civil (13)	"	60	(10)	(10)		5	100	31-12-81	A 310
CFM 56-2, -3 ..	10/15 t civil (13)	"	475	(10)	(10)		5	95	31-12-81	DC 8, KC 135, B 737
Atar 8K50	Turboreacteur militaire (14)	Snecma	111	(10)	(10)		2	16	31-12-81	Super Etendard
Atar 9C	"	"	1 394	(10)	(10)		20	72	31-12-81	Mirage 3,5
Atar 9K50	"	"	946	(10)	(10)		12	62	"	Mirage F1
M 53-5	"	"	70	(10)	(10)		1	0	"	Mirage 2000
Larzac 04	"	Snecma, Turbomeca, MTU, KHD (18)	1 157	(10)	(10)		9	63	"	Alpha Jet
Adour	"	Turbomeca Rolls-Royce	2 000	1 850	(10)				31-12-81	Jaguar, Hawk, Japon
Tyme MK21/22 ..	Turbopropulseur (15)	Snecma, MTU, Rolls-Royce, FN (18)	95	(10)	(10)		3	14	"	Atlantic, Transal
Arbizon III	Turboreacteur (16)	Turbomeca	361	348	11,5				31-12-81	Missile mer-mer Otomet (19)
Marboré-6	"	"	(4)	1 299					"	
Arriel	Turbomoteur (17)	"	759	544	34,5				"	Dauphin 2, Ecureuil
Makila	"	"	400	84	11				"	Super Puma
Artouste-III ...	"	"	2 500 (5)	2 432	4,5				"	Lama, Alouette-3
Astazou XIV, XVIII	"	"	800 + (6)	758	6				"	Alouette-3, Gazelle, Dauphin
Astazou XVI ..	Turbopropulseur (15)	"	400 + (7)	310	4				"	
Astazou IIIA, B, C et N	Turbomoteur (17)	"	(9)	814	2				"	Gazelle
Turmo-III C4, 4A, 4B, 4C	Turbomoteur (17)	"	(8)	1 822	2,7				"	Puma Super Frelon

[Table concluded and key supplied on following page]

FOR OFFICIAL USE ONLY

TM 333	Turbomoteur (17)	.	-	-	-				.	2 prototypes
TRI 60	Turboréacteur militaire (14)	Microturbo	150 +	100	5				.	Missiles
TRS 18	Turboréacteur (16)	.	100 +	200	3 à 4				.	Missiles et avions (20)

(1) + = options possible. (2) + mean upward; = means stationary; - means downward.
 (3) Most recent date on which at least one of the elements in the line was updated.
 (4) Marbore: more than 5,700 sold, in all versions. (5) 78 to be delivered.
 (6) 192 to be delivered. (7) 108 to be delivered. (8) 30 to be delivered. (9) 38
 to be delivered. (10) Not communicated by the manufacturer.

Key:

- | | |
|----------------------------|-------------------------------|
| 1. Gas Turbine Engines | 11. Situation Date |
| 2. Program | 12. Notes |
| 3. Function | 13. civilian |
| 4. Manufacturers | 14. Military turbojet |
| 5. Orders (firm + options) | 15. Propeller turbine engine |
| 6. Delivered | 16. Turbojet |
| 7. Monthly rate | 17. Impulse turbine |
| 8. Trend | 18. [expansions unknown] |
| 9. Number of countries | 19. Otomat sea-to-sea missile |
| 10. Export % (as number) | 20. Missiles and airplanes |

(1) MISSILES TACTIQUES			(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) Remarques
(2) Programme	(3) Fonction	(4) Constructeurs	Commandés	Livrés	Cadence/mois	Tendance	Nombre pays	% export	Date de situation	
SS11/AS11	(15) Anti-chars	Aérospatiale	178 838	173 482	250	-	32	58.6	1-01-82	
SS12/AS12 .....	.	Aérospatiale	9 544	8 873	40	-	28	79.3	1-01-82	
HOT .....	.	Aérospatiale	35 933	31 087	900	+	13	88.5	1-01-82	
MILAN .....	.	Aérospatiale	158 656	118 268	1 850	=	26	71.9	1-01-82	
Roland	(16) Arti-Aérien	Aérospatiale	17 222	3 796	400	=	7	71.1	1-01-82	
Crotale .....	.	Th.-CSF/Metra	3 377			=	10	66	1-01-82	
Shahine .....	.	Th.-CSF/Metra				+	1	100	1-01-82	
SATCP .....	.	Metra	.	.		+			1-01-82	* En développement (22) Livraison 1986

[Table concluded and key supplied on following page]

FOR OFFICIAL USE ONLY

Exocet MM 38.	(17) Anti-Navires	Aérospatiale	1 236	1 096	8	—	18	86.5	1-01-82	
Exocet MM 40.	"	Aérospatiale	307	24	5	+	(12)	10	93.2	1-01-82 (23) Livraison fin 1981
Exocet AM 39.	"	Aérospatiale	271	152	5	+	(8)	7	88.6	1-01-82
Exocet SM 39.	"	Aérospatiale	"	"		+		1	0	1-01-82 * En développement (22) Livraison 1982
Otomat	"	Matra/OTO Melara	434						100	1-01-82
ANS	"	Aérospatiale	"	"		+				1-01-82 * En développement (22) Livraison 1988
AS 15 TT	(18) Air-Surface	Aérospatiale	200*	"		+		1	100	1-01-82 * En développement (22) Livraison 1984
AS 30 Laser ..	"	Aérospatiale	"	"		+		1	0	1-01-82 * Fin développement (24) Livraison 1983
Bombe Laser ..	"	Matra	"	"						1-01-82 (25) En développement
Beluga	"	Matra	2 240						81	1-01-82
Durandal	(19) Anti-pistes	Matra	5 328						100	1-01-82
Super 530	'Air-Air	Matra	900						28	1-01-82
550 Magic	"	Matra	6 080						70.5	1-01-82
CT 20	(20) Engin-Cible	Aérospatiale	1 466	1 443	4	—		5	20.6	1-01-82
C 22	"	Aérospatiale	"	"		+				1-01-82 (22) En développement Livraison 1983
Bombes Freinées (13)	(21) Aéroporté	Matra	16 500						90	1-01-82
Lance-roquettes 68 mm (14)	"	Matra	4 120						60	1-01-82

Key:

- | | | |
|------------------------|---------------------------------|---------------------------------------|
| 1. Tactical Missiles | 12. Notes | 23. Delivery end of 1981 |
| 2. Program | 13. Braked bombs | 24. End of development; delivery 1983 |
| 3. Function | 14. 68-mm rocket-launchers | 25. Under development |
| 4. Manufacturers | 15. Antitank | |
| 5. Ordered | 16. Antiaircraft | |
| 6. Delivered | 17. Antiship | |
| 7. Rate per month | 18. Air-to-surface | |
| 8. Trend | 19. Antirunway | |
| 9. Number of countries | 20. Target missile | |
| 10. Export % | 21. Airborne | |
| 11. Situation Date | 22. Under development; delivery | |

COPYRIGHT: A. & C. 1982

11267

CSO: 3100/383

FOR OFFICIAL USE ONLY

MILITARY

FRANCE

PRODUCTION, SALES, PLANS FOR NEW NAVAL MISSILES DETAILED

Paris AIR ET COSMOS in French 20 Feb 82 pp 43, 45, 47, 51, 54

[Article by Pierre Langereux: "New French Naval Missiles"]

[Text] France is one of the most advanced countries as regards naval weapons systems. The Masurca, Malafon, Martel, As-12 - SS-12-M and other As-20 and AS-30 air-to surface missiles developed in the 1960's and 1970's are presently in service in several dozen foreign countries.

But some new French naval missiles have made their appearance in recent years: the "naval Crotale" and Exocet and Otomat antiship missiles, which have already been ordered by some 30 countries.

Other missiles are also under development for the 1990's: the SATCP (Surface-to-Air Very-Short-Range) missile and the AS-15-TT and supersonic ANS light antiship missiles.

"Naval Crotale" Antimissile Missile

The "naval Crotale" of Thomson-CSF [General Radio Co], the missile part of which was developed with MATRA [Mechanics, Aviation and Traction Co], is a short-range (more than 10 km) all-weather surface-to-air weapon system capable of intercepting aircraft flying at low altitude, with also a certain interception capacity against the "sea skimmer" antiship missiles.

The "naval Crotale" is presently in operational service in the Navy, which has planned to equip more than 10 ships with it: C-70 corvettes, F-67 frigates, etc. It has also been adopted for the four F-2000 frigates of Saudi Arabia, which is presently the only country to have acquired the three versions of the system.

The weapon system, in its Crotale, "naval Crotale" and Shahine/SICA [expansion unknown] versions, is presently on order by 11 armed forces of 8 countries, including France (2 systems), Saudi Arabia (3 systems), South Africa, Egypt, Libya, Pakistan, the United Arab Emirates (Abu Dhabi), and Chile, which is the most recent customer.

More than 1,800 Exocets

To date, more than 1,800 of Aerospatiale's Exocet antiship missiles have been ordered by more than 26 countries, including France, presently the only country that has adopted all versions of the missile: the MM-38 sea-to-sea, the AM-39 air-to-sea, the SM-39 submarine to sea, and the MM-40 long-range sea-to-sea.

FOR OFFICIAL USE ONLY

The navies of 18 countries, including France, have ordered 1,236 of the MM-38 sea-to-sea Exocet to date, to equip 178 ships (see table below). Aerospatiale has already delivered nearly 1,100 MM-38 missiles and has done more than 110 development and evaluation firings of it since it was placed in service in January 1974. The missile is manufactured under license by Great Britain, which has adopted it for itself.

The long-range--more than 70 km--MM-40 sea-to-sea Exocet became operational in the French Navy in February, after two successful validation firings, one of them at the hull of the decommissioned escort vessel "Le Basque" at a distance of 65 km, from the experimentation ship "Ile d'Oleron."

The first French ship to be equipped with MM-40's is the A-69 dispatch boat "Premier Maitre l'Her," which will be fitted out in the spring of 1982. The MM-40 is also to be put on five other A-69 dispatch boats and seven C-70 antiaircraft and antisubmarine corvettes; it is also planned, in the longer term, for it to replace the MM-38's on all the Navy ships already equipped, beginning with the three F-67 Tourville frigates.

But the MM-40 has already been in service abroad for a year. To date, 307 MM-40 missiles have been ordered by 10 countries (see table below), including France, which adopted it more than a year ago (cf AIR ET COSMOS, No 824). The MM-40's ordered will arm a total of some 50 French and foreign ships.

Among the foreign countries, it should be noted that six new Exocet customers have ordered the MM-40: Abu Dhabi, Bahrein, Kuwait, Qatar, Tunisia and Colombia (order not confirmed). As can be noted, the MM-40 has made a remarkable breakthrough among the Gulf countries in the last 6 months.

Qatar, in particular, has ordered three Combattante 3M patrol boats, each armed with eight MM-40 missiles. The first two units will be delivered in August and October 1982, and the third in January 1983.

One Gulf country, already equipped with AM-39's and MM-40's (on board ship), is also the first customer for the coastal-batter version of the MM-40. This version, mounted on a Berliet GBD 6 X 6 all-terrain vehicle, will be operational in 1983. Firings of MM-40 missiles (engine-driven mockups) have already been taking place since the beginning of 1981. A firing of a complete MM-40 missile in its coastal-battery version is planned for mid-1982.

The AM-39 air-to-sea Exocet is an improved airborne version, with range varying from 50 to 70 km, depending on the type of aircraft--helicopter or airplane--and the firing altitude. The adaptation of the AM-39 was completed in February 1982 (after five firings, four of them successful) from the carrier-based airplane Super Etendard, and it is in progress on the Atlantic NG airplane, for France, where the AM-39 will be operational this year. But the AM-39 has already been in service abroad since 1978, particularly on helicopters: the Sea King in Pakistan and the Super-Frelon in Iraq. Furthermore, the Iraqi Navy is reported to have sunk two Iranian patrol boats and one frigate with the aid of AM-39 missiles fired from Super-Frelons (cf "Flottes de Combat" [Combat Fleets] - 1982). In the export field, the adaptation of the AM-39 for the Agusta SH-3D helicopter (the Italian version of the Sea King) has also been completed, and it is in progress for Aero-

FOR OFFICIAL USE ONLY

Exocet MM-38 Missiles (18 Countries)

(1) Pays / Navires	(2) Classe	(3) Nombre de	
		(4) Navires	Missiles per unité (5)
FRANCE (6)			
Croiseur (6)	Colbert	1	4
Porte hélicoptères (7)	Jeanne d'Arc	1	6
Frégates (8)	Tourville	3	6
Escorteurs (9)	Duperré	1	4
Frégates (8)	Suffren	2	4
Corvettes	George Leygues	2	4
Avisos (10)	Cdt Rivière	8	4
Avisos A69		4 (1)	2
Patrouilleurs (11)	Super Patra	6	2
ALLEMAGNE (12)			
Destroyer	Hamburg	4	4
Patrouilleurs (11)	S 148	20	4
Patrouilleurs (11)	S 143	10	4
Patrouilleurs (11)	S 143 A	10	4
ARGENTINE (13)			
Destroyer	Comodoro	1	4
Destroyers	Sequi	3	4
Frégates (8)	Drummond	3	2
BELGIQUE (14)			
Frégates (8)	Westhinder	4	4
BRESIL (15)			
Frégates (8)	Constitucão	2	4
BRUNEI (16)			
Patrouilleurs (11)	Waspadd	3	2
CHILI (16)			
Destroyers	Almirante Riveros	2	4
Destroyers	Condell	2	4
COREE DU SUD (17)			
Patrouilleurs (11)	PKM 121	2	2
EQUATEUR (18)			
Corvettes (11)	Esmeraldas	6	4 (2)
Patrouilleurs	Ouito	3	4
GRANDE-BRETAGNE (19)			
Destroyers	County	5	4
Frégates type 22 (8)	Broadsworth	7	4
Frégates type 21 (8)	Amazon	5 (3)	4
Frégates type 12 (8)	Leander	8	4
GRECE (20)			
Patrouilleurs (11)	Antipharos Lascos	4	4
Patrouilleurs (11)	Komidis	4	4
INDONESIE (21)			
Frégates (8)	Fatehillah	3	4
Patrouilleurs (11)	Rengong	2	4
MALAISIE (22)			
Patrouilleurs (11)	Handalan	4	4
Patrouilleurs (11)	Serang	4	2
MAROC (23)			
Frégate (8)	Descubierta	1	4
Patrouilleurs (11)	Cormoran	4	4
NIGERIA			
Patrouilleurs (11)	Siri	3	4
OMAN			
Patrouilleurs (11)	Al Mansur	3	2

[Table concluded and key supplied on following page]

FOR OFFICIAL USE ONLY

PEROU (24)			
Croiseur (6)	Aguirre	1 (4)	4
Destroyers	Palacios	2	8
Destroyers	Quinones	6 (4)	—
Patrouilleurs (11)	Velarde	8	4
THAILANDE (25)			
Patrouilleurs (11)	Ratcharit	3	4

Editor's Notes: (1) Four equipped out of 17 planned, including 6 with MM-40's. (2) MM-38 or MM-40 missiles. (3) Three other frigates planned. (4) Armament planned, ships under construction.

Key:

- | | |
|-----------------------|-------------------|
| 1. Countries/Ships | 14. Belgium |
| 2. Class | 15. Brazil |
| 3. Number of | 16. Chile |
| 4. Ships | 17. South Korea |
| 5. Missiles per unit | 18. Ecuador |
| 6. Cruiser | 19. Great Britain |
| 7. Helicopter carrier | 20. Greece |
| 8. Frigates | 21. Indonesia |
| 9. Escort vessel | 22. Malaysia |
| 10. Dispatch boats | 23. Morocco |
| 11. Patrol boats | 24. Peru |
| 12. FRG | 25. Thailand |
| 13. Argentina | |

spatiale's Super-Puma; furthermore, it is nearing completion for the Mirage 50 fighter, and is in progress for the Mirage F-1 for some foreign customers. Thus, adaptation of the AM-39 will soon have been completed for eight types of aircraft. But the Mirage 2000 and other French or foreign aircraft could also be armed with the AM-39.

To date, 7 countries, including France, Iraq, Pakistan, South Africa, and perhaps Peru also, have ordered 271 AM-39 missiles to arm 76 aircraft--helicopters and airplanes.

The Exocet SM-39 is a new antiship version, fired from submerged submarines and having a range of 50 km. It is presently being developed for the French Navy, which will arm its Agosta conventional attack submarines and its SNA's [Nuclear-Powered Attack Submarines] with it, as well as the SNLE's [Missile-Launching Nuclear Submarines] of the Strategic Naval Force (cf AIR ET COSMOS, No 881). The first units to be equipped with it will be the SNA's, which are planned to go into service in mid-1984. It is not presently planned to export this version of the Exocet.

ANS Supersonic Missile in 1988

Aerospatiale believes it can sell up to about 1,400 MM-38 and 700 MM-40 missiles before the placing in service of the future ANS [Supersonic Antiship] missile planned for 1988 (cf AIR ET COSMOS, No 865).

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

Exocet MM-40 Missiles (10 Countries)

(1) PAYS/NAVIRES	(2) CLASSE	(3) NOMBRE	
		de navires (4)	de missiles par unité (5)
FRANCE :			
Corvette	Montcalm	1	4
Corvette ASM C70		3	4
Corvette AA C70		3	8
Aviso A 69 (6)		6	4
Autres unités (1) (7)			
ARGENTINE : (8)			
Frégates (9)	Almirante Brown	4	8
BAHREIN :			
Patrouilleurs (10)	TNC 45	2	4
COLOMBIE : (11)			
Frégates (9)	Descubierta	4	(2)
EMIRATS ARABES UNIS (ABU DHABI)			
Patrouilleurs (10)	Banyas	6	4
KOWEIT : (13)			
Patrouilleurs (10)	TNC 45	6	4
OMAN :			
Patrouilleurs (10)	Dhofar	3	6
QATAR :			
Patrouilleurs (10)	Combattante 3 M	6	8
TUNISIE : (14)			
Patrouilleurs (10)	Combattante 3	3	8
MALAISIE : (15)			
Frégates 1 500 t. (9)		2	8

Editor's Notes: (1) The MM-40 is to replace the MM-38's on the units already equipped. (2) The equipping of Colombia's frigates with Exocets has not been confirmed.

Note: One Gulf country has also ordered the MM-40, in the coastal-battery version.

Key:

- | | | |
|-------------------------|------------------|--------------------------------------|
| 1. Countries/Ships | 6. Dispatch boat | 11. Colombia |
| 2. Class | 7. Other units | 12. United Arab Emirates (Abu Dhabi) |
| 3. Number | 8. Argentina | 13. Kuwait |
| 4. of ships | 9. Frigates | 14. Tunisia |
| 5. of missiles per unit | 10. Patrol boats | 15. Malaysia |

The ANS project is presently being carried out under Franco-FRG cooperation by Aerospatiale, prime contractor, in cooperation with MBB [Messerschmitt-Bolkow-Bloehm] as principal joint contractor. The choice of ramjet type (solid or liquid fuel) to be made in 1984 will determine the characteristics and performance of the future missile, though it is already known that it will have a range of about 180 km. The missile will be entirely autonomous, with a Super-ADAC [Automated analog computer?] active radar self-guidance system from the ESD [Electronics Systems Division?] company, which already makes the electromagnetic self-guidance systems for all the Exocets.

Delivery of the Dauphin 2 - AS-15-TT in 1984

The new AS-15-TT antiship missile is being developed by Aerospatiale as the successor to the AS-12 (ordered by 26 countries) and as a complement to the Exocet AM-39.

FOR OFFICIAL USE ONLY

The AS-15-TT is a light (100 kg, including 30-kg charge), short-range (15 km), all-weather radar-guided missile. It is used with the aid of Thomson-CSF's Agrion 15 detection radar and target designation.

The AS-15-TT is presently being developed in an air-to-surface version to be carried on Aerospatiale's SA-365-F/Dauphin 2 helicopter, for Saudi Arabia, the first customer for the new weapon system. The Dauphin 2 (3.8 tons) can carry two or four AS-15-TT's. The heavy AS-332-F Super-Puma helicopter (7.8 tons) can carry four or six AS-15-TT's, as is proposed by Aerospatiale for India. But it is also planned to develop an air-to-surface version for slow airplanes, as well as sea-to-sea versions for ships, and ground-to-sea for coastal batteries.

The first firing of the AS-15-TT missile took place on 22 June 1981. Since then, advanced development has been proceeding favorably. The first firing of a complete nonguided missile was carried out successfully at the end of 1981, and the tests of the Agrion 15 radar on the Dauphin 2, carried out at Gavres in January 1982, have confirmed the performance characteristics counted on (detection capacity and precision of distance measurement). These tests are to continue until mid-1982. Another Dauphin 2 is to receive its AS-15-TT firing installation for the adaptation tests (launching, stability, etc).

The first firing of a complete AS-15-TT missile with radar guidance (from the ground) will take place next May, and the start of in-flight firings from the Dauphin helicopter with Agrion 15 radar is planned for the end of 1982.

The validation of the Dauphin 2/AS-15-TT weapon system is planned for September 1982 to mid-1983, with the first-off-the-line SA-365-F helicopter, which will be used for the missile-qualification firings starting in mid-1983.

The Dauphin 2/AS-15-TT weapon system of the "Sawari" contract will be delivered to Saudi Arabia starting in 1984 and to the end of 1985 or the beginning of 1986.

Otomat, Teseo and ERATO

In its different versions, 434 of the Otomat weapon system, developed under Franco-Italian cooperation by MATRA and Oto Melara, have already been sold to 7 foreign countries, and an eighth contract is presently being negotiated with another country (Iraq). These sales have been made by MATRA and Oto Melara for their respective weapons systems.

The Otomat exists in four configurations, in accordance with the conduct of fire and the missile used, which also determines the missile's operational range: 60 NM [nautical miles] (100 km) without in-flight adjustment and 90 NM (160 [as published] km) with in-flight adjustment (mainly by helicopter). The missile, with Turbomeca turbojet propulsion, can technically (in terms of fuel reserve) reach maximum range in all cases.

Oto Melara has developed an Otomat Mk 1 with conduct of fire without adjustment and an Otomat Mk 2 with Teseo conduct of fire using in-flight adjustment by a helicopter in an advance position; the helicopter takes control of the missile in flight.

FOR OFFICIAL USE ONLY

This Teseo version is used on all of Italy's and Peru's ships equipped with the Otomat; the ships of Nigeria, Venezuela and Egypt have the simplified Italian conduct of fire, with Italian or French missiles. The missiles are identical on the whole, except for the level of guidance: the Italian missiles use an Italian SMA [expansion unknown] self-guider (one axis), and the French missiles, a French self-guider (two axes) from Thomson-CSF.

MATRA has also developed an Otomat Mk 1 that uses the CLIO (Otomat Integrated Launching Conduct) conduct of fire developed in cooperation with the ECAN [Naval Weapons and Construction Enterprise] of Ruelle. MATRA is presently completing development of the Otomat Mk 2 version that uses the new ERATO (Extended-Range Automatic Targeting of Otomat) conduct of fire, which permits transhorizon targeting of the missile (French or Italian) through acquisition of the new target coordinates by an advance helicopter, with the launching ship retaining control over the communications.

The first customer for the Otomat Mk 2 weapon system, ERATO version, is Saudi Arabia, which has decided on it to arm the four 2,000-ton frigates ordered from France within the framework of the "Sawari" contract.

The Otomat weapon system, ERATO version, is the first to use the "compact Otomat" missile with retractable wings, presently being developed by MATRA. But it is planned to associate Oto Melara in this project, notably for manufacture of the containers-launching ramps. Thanks to the "compact Otomat" missiles in ovoid container, it is possible to double the number of missiles on a given ship with the same installation. However, the new missiles are identical to the preceding ones, except for the starting of the turbojet, which is now done by a hot-gas generator (pyrotechnic).

The first firing of a "compact Otomat" missile was carried out successfully by MATRA on 16 February. It made it possible to test the missile's initial ejection phase and the deployment of the wing, which is an innovation vis-a-vis the other Otomats.

The "compact Otomat" weapon system, ERATO version, intended for the Saudi frigates, will be operational in 1983.

The coastal-battery version of the Otomat uses a different conduct of fire but one with the same capacity as ERATO, but with the Otomat Mk 1 missile, which may eventually be replaced by the "compact Otomat." This coastal-battery version is to be operational in about 2 years. But developmental and demonstration firings have already taken place.

The first country to order the coastal-battery version of the Otomat weapon system is Egypt, which is thus the world's first country to have a long-range antiship missile launched from land, from containers mounted on Berliet GBD 6 X 6 all-terrain trucks, with the aid of a type-TRS [expansion unknown] 3410 (Thomson-CSF) detection radar and target-designation.

This coastal-battery configuration, making it possible to guard 360 km of coast, is on the whole very advantageous in certain cases (guarding of narrows, etc); but it is not yet very widespread for a very simple reason: in most armed forces, the deployment of such a weapon does not come under any branch (neither land nor sea)!

FOR OFFICIAL USE ONLY

Otomat Missiles (8 Countries)

<u>Countries/Ships</u>	<u>Class</u>	<u>Number of</u>	
		<u>Ships</u>	<u>Missiles per unit</u>
Saudi Arabia			
F-2000 frigates		4	8 (4)
Egypt			
Patrol boats	Ramadan	6	4 (1)
Patrol boats	6 October	6	2 (1)
Coastal batteries		--	2
Italy			
Helicopter carriers	Garibaldi	1	4 (3)
Frigates	Maestrale	6	4 (3)
Frigates	Lupo	4	8 (3)
Hydrofoils	Sparviero	6	2 (3)
Iraq			
Frigates	Lupo	4	-- (*)
Libya			
Frigate	Dat Assawari	1	4 (2)
Corvettes	Wadi M'Rach	4	4 (2)
Patrol boats	Beir Grassa	10	4 (2)
Nigeria			
Frigate	Aradu	1	8 (1)
Patrol boats	Ekpe	3	4 (1)
Peru			
Frigates	Carvajal	4	8 (3)
Venezuela			
Frigates	Mariscal Sucre	6	4 (1)
Patrol boats	Federacion	3	2 (1)

Editor's Notes: The Otomat weapon system exists in four configurations, in accordance with conduct of fire and the missile used:

- (1) Italian Otomat Mk 1
- (2) French Otomat Mk 1 with CLIO conduct of fire
- (3) Italian Otomat Mk 2 with Teseo conduct of fire
- (4) French Otomat Mk 2 with ERATO conduct of fire

Configurations (3) and (4) use long-range Otomat Mk 2 missiles, as do the coastal batteries.

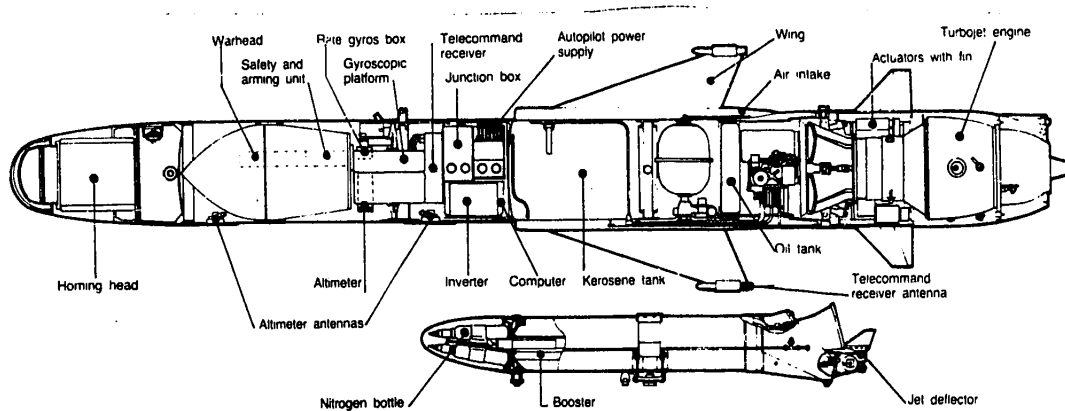
(*) The Iraqi order for Otomat missiles for its frigates is about to be signed.

Long-Range Missile with Supersonic Turbojet

The Franco-Italian cooperation between MATRA and Oto Melara extends also to the studies for the future supersonic antiship missile that is to take over from the present Otomats at the end of the 1980's or the beginning of the 1990's. These studies had begun in Oto Melara in the form of the "Briaereo" missile project.

In contrast to Aerospatiale and MBB, which are studying a project for an ANS supersonic antiship missile with ramjet propulsion, MATRA and Oto Melara are oriented

FOR OFFICIAL USE ONLY



Interior layout of the Otomat missile, with, from front to rear: self-guidance system, warhead, telecommand gyroscope, fuel and engine-oil tanks, turbojet and booster (separate)

toward an aerobic sea-to-sea missile with supersonic turbojet engine. This engine is to be developed by the GRM [expansion unknown] group (SNECMA [National Aircraft Engine Design and Manufacturing Co]-Turbomeca), in cooperation with an Italian engine manufacturer (Alfa Romeo).

MATRA justifies the choice of aerobic propulsion by the lower specific consumption of a supersonic turbojet engine functioning at Mach 1.6 - 1.8 by comparison with a ramjet designed for Mach 2.3 - 2.5, and the advantage it thus offers by way of reaching longer ranges. The final maneuverability of the two types of missile is to be comparable.

Naval SATCP on Turret

The SATCP very-short-range surface-to-air weapon system, being developed by MATRA under the aegis of the DTEn [Technical Directorate for Missiles], is to be made in four versions, varying with the "carriers": on a tripod for infantry troops, on a land vehicle (armored or unarmored), on helicopters, and on ships (the shoulder-fired version for infantry troops has been abandoned).

The naval version of the SATCP is intended in principle to be installed on "all surface vessels of the Navy, to strengthen their defense" (cf "Flottes de Combat" - 1982). In particular, it will be very advantageous for small vessels which, because of their size, cannot make use of very elaborate, and therefore heavier, anti-aircraft systems such as the "naval Crotale."

With this in mind, MATRA is designing a naval version of the SATCP with a very compact configuration and using an existing turret. MATRA's choice is presently for the Tantale turret of the CSEE [Electrical Enterprise and Communications Company] already in service.

The naval version of the SATCP on the Tantale turret could be installed on any type of warship, from light patrol boats to heavy cruisers, and even on merchant ships (freighters), in which case the weapon system could be installed in a transportable container.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

The SATCP turret, the prototype of which was recently presented to us, should weigh less than 1 ton (about 750 kg) with six SATCP missiles on their ramps ready for firing, an optical sighting telescope, and the cryogenic cooling system for the infrared self-guiders (SAT [Independent Telecommunications Co]). It is intended for the turret to be stabilized.

The naval SATCP will be able to use different means of targeting: optical guidance station, infrared monitoring system, or on-board radar. On big ships armed with the "naval Crotale," the SATCP system could benefit from that weapon system's targeting equipment and thus give it extra protection during reloading.

The SATCP, as we recall (cf AIR ET COSMOS, No 864), is a light (20-kg missile), very-short-range (4 to 5 km), and very-short-reaction-time surface-to-air weapon system. The SATCP is designed mainly for intercepting airplanes and helicopters flying at subsonic or supersonic speed at low altitude. It is also planned to give the SATCP some capacity for intercepting skimming-trajectory antiship missiles (sea skimmers).

In its basic version (portable), the SATCP, being developed by MATRA--with the SAT, the SEP [European Propellant Co] and the SNPE [National Powder and Explosives Co]--is to be placed in operational service in 1986. The naval version, which will require additional development and testing, should be available, under these conditions, around 1987-1988.

The Navy is obviously very interested in the SATCP, whose development it is financing. But several NATO countries to which MATRA presented the SATCP at the beginning of this year are also interested in the French weapon system, whose principal competitor is the American Stinger.

COPYRIGHT: A. & C. 1982

11267
CSO: 3100/382

FOR OFFICIAL USE ONLY

MILITARY

FRANCE

AEROSPATIALE SELLS RECORD NUMBER OF TACTICAL MISSILES

Paris AIR ET COSMOS in French 20 Feb 82 p 41

[Article by Pierre Langereux: "Record Sales of Tactical Missiles by Aerospatiale in 1981--Order Book of Fr 11.8 Billion and Fr 4.35 Billion in Turnover for Missiles"]

[Text] In 1981, the Tactical Missiles division of Aerospatiale, directed by Michel Allier, had a turnover (not including taxes) of Fr 4.35 billion, an increase of more than Fr 1 billion (up 34 percent) over 1980 [as published] (Fr 3.25 billion). The Tactical Missiles division is thus doing more than one-fourth of the Aerospatiale group's turnover, which in 1981 came to more than Fr 15 billion. For the current year, though, a more modest increase is expected--in the neighborhood of Fr 4.5 billion turnover for tactical missiles.

This result is made up of the three weapons systems manufactured under Franco-FRG cooperation for Euromissile--i.e., the antitank Milan (more than 158,000 missiles ordered) and Hot (nearly 36,000 missiles ordered), as well as the ground-to-air Roland (more than 17,000 missiles ordered). These have been the division's strong points for several years now.

With the antiship missiles, Exocet (more than 1,800 missiles ordered) which represent about 30 percent of the turnover; with the other programs thus providing about 20 percent of the result. [as published]

But many programs are under development and will not contribute to boosting of production until a few years from now. We mention the C-22 target missile, the AS-15-TT air-to-ground missile, the SM-39 submarine-to-surface missile and the ASMP [Medium-Range Air-to-Surface Missile] tactical nuclear missile. To this could also be added the ANS [Anti-Ship Supersonic Missile] supersonic antiship missile (designed under Franco-FRG cooperation), and perhaps also the Hades tactical nuclear missile (successor to the Pluton), if these programs are effectively launched.

Operational evaluation of the AS-30 Laser missile is to begin in July or September and be completed at the beginning of 1983. An initial Air Force order, for its Jaguars, is expected this year, which should result in deliveries for France at the end of 1983. Two foreign countries are also interested in the AS-30 Laser, which could be delivered to them in 1984.

As for the C-22 target missile, successor to the CT-20, delivery of the first version (with Thomson-CSF [General Radio Company] guidance) to the French CEL [Landes

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

Testing Center] firing range is planned for 1983 (18 specimens). The definitive version, with integrated guidance (TTL [expansion unknown]) is to be delivered to the French CEM [Mediterranean Test Center] firing range at the end of 1984 and should be available for exportation at the beginning of 1985.

Orders and Deliveries of Tactical Missiles

(1) MATERIELS		(2) Commandes			(3) Product.		(4) Livraison		(5) Pays	
		Total	Export	% Exp.	Total	Total	Total	Total	Total	Total
(5) Production arrêtée	SS 10	29 849	18 030	60,40	29 849	29 849				
	ENTAC (6)...	119 417	43 762	36,65	119 417	119 417			13	
	AA 20 - AS 20.	5 737	892	15,55	5 737	5 737			5	
	AS 30	3 855	3 028	78,55	3 855	3 855			6	
	CT 10	413	73	17,67	413	413			1	
	R 20	62	0	0	62	62			1	
	M 20	98	98	100	98	98			1	
	TOTAL	159 431	65 883	41,32	159 431	159 431				
(7) En cours de production	SS 11 - AS 11.	178 838	101 145	56,55	178 825	173 492			32	
	SS 12 - AS 12.	9 544	7 573	79,34	9 558	8 673			26	
	CT 20	1 469	302	20,55	1 443	1 443			5	
	C 22	—	—	—	—	—			—	
	MM 38	1 236	1 089	88,48	1 117	1 086			10	
	AM 39	271	186	68,63	157	152			7	
	MM 40	307	286	93,15	34	24			10	
	SM 39	—	—	—	—	—			1	
	AL 15 TT	200	200	100	—	—			1	
	AS 30 L	—	—	—	—	—			—	
	TOTAL	191 865	110 761	57,72	188 934	185 080				
Euromissile	Milan	158 656	114 069	71,89	123 200	118 268			26	
	Hot	35 933	31 087	86,51	20 907	19 307			13	
	Roland	17 222	12 251	71,14	6 044	2 796			7	
	TOTAL	211 811	157 407	74,31	150 151	141 371				
TOTAL général (8)		563 107	334 051	59,32	498 516	485 652				

Key:

- | | |
|--------------|--------------------------|
| 1. Matériel | 5. Production decided on |
| 2. Orders | 6. [expansion unknown] |
| 3. Delivery | 7. In production |
| 4. Countries | 8. Grand Totals |

The order book of the Tactical Missiles division presently totals Fr 11.84 billion, up 17 percent over 1980 (Fr 10.09 billion). This represents a little more than 2 years of activity for the division.

Up to the end of 1981, Aerospatiale has taken orders for more than 563,000 missiles, nearly 486,000 of which have already been delivered. Exportation accounts for a total of more than 334,000 missiles, or 59 percent; but the proportion is more than 74 percent for the three Euromissile programs: Milan (26 countries) and Roland (7 countries). It even approaches 90 percent for the Exocet antiship missiles: MM-38 (18 countries), MM-40 (10 countries) and AM-39 (7 countries).

COPYRIGHT: A. & C. 1982

41

11267
CSO: 3100/384

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

MILITARY

FRANCE

BRIEFS

RAMJET ENGINE FOR MISSILE--ONERA [National Office for Aerospace Studies and Research] and the MATRA [Mechanics, Aviation and Traction Co] company are presently completing the development, under the aegis of the Technical Directorate for Missiles (DTen), of a test model of a ramjet-propulsion tactical missile intended for flight-testing of this "rustic" engine (without moving mechanical parts). The use of ramjet propulsion on a tactical missile makes it possible, for a given bulk, to augment its performance characteristics or, for a given range, to reduce its length. But its application to short-range or medium-range missiles has to meet the fundamental requirement of low manufacturing cost, and it is necessary to adopt simple technological approaches, even at the cost of a slight decrease in performance characteristics. Such are the characteristics of the "rustic" aerobic engine designed at ONERA some years ago, the performances characteristics of which are far superior to those of conventional rocket engines. This engine comprises:

--a conventional-propellant nozzleless accelerator, integrated into the ramjet's combustion chamber, with the chamber's tightness provided, as regards the air intake, by hatches that eject at the end of the acceleration phase by simple difference of pressure; and one or more fuels, housed within the combustion chamber that is thus exposed, and ignited naturally during the process. The single pyrotechnic initial firing command is sufficient to trigger the various phases of functioning. [Text] [Paris AIR ET COSMOS in French 20 Feb 82 p 39] 11267

COPYRIGHT: A. & C. 1982

CSO: 3100/384

END

FOR OFFICIAL USE ONLY